

Title (en)
PUMP-SECURING STRUCTURE AND PUMP

Title (de)
PUMPENFIXIERSTRUKTUR UND PUMPE

Title (fr)
STRUCTURE DE FIXATION DE POMPE ET POMPE

Publication
EP 2873868 A1 20150520 (EN)

Application
EP 13806282 A 20130606

Priority
• JP 2012136593 A 20120618
• JP 2013065641 W 20130606

Abstract (en)
The present invention provides a pump-securing structure for securing, to a securing stand, a pump having a pump part and a motor part, wherein the pump-securing structure is able to minimize the transmission of vibration from the motor part to the securing stand even if a part of the pump to be secured to the securing stand changes over time and deforms. In a pump-securing structure (1), a pump (2) is provided with a pump part (6) having an internally disposed impeller, and a motor part (7) for spinning the impeller. The motor part (7) is provided with a resin motor case (14) and is integrated with a stator; and the external peripheral surface of the motor part (7) describes the form of a substantially truncated conical surface having a draft angle for removing the motor case (14) from a die used when integrally forming the stator and the motor case (14). A securing stand (3) is provided with a motor-supporting part (3a) disposed below the motor part (7) and a part (9d) to which the pump part (6) is secured is secured to the securing stand (3). A buffer member (34) is disposed between the motor part (7) and the motor-supporting part (3a).

IPC 8 full level
F04D 29/66 (2006.01); **F04D 13/06** (2006.01); **F04D 29/02** (2006.01); **F04D 29/42** (2006.01)

CPC (source: CN EP US)
F04D 1/04 (2013.01 - US); **F04D 13/0606** (2013.01 - US); **F04D 13/064** (2013.01 - CN EP US); **F04D 13/0686** (2013.01 - CN); **F04D 13/0693** (2013.01 - EP US); **F04D 29/026** (2013.01 - EP US); **F04D 29/426** (2013.01 - US); **F04D 29/605** (2013.01 - CN EP US); **F04D 29/628** (2013.01 - CN US); **F04D 29/669** (2013.01 - CN EP US); **F05D 2300/171** (2013.01 - EP US); **F05D 2300/43** (2013.01 - EP US); **F05D 2300/501** (2013.01 - EP US)

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 2873868 A1 20150520; **EP 2873868 A4 20160413**; **EP 2873868 B1 20190123**; CN 104364533 A 20150218; CN 104364533 B 20160928; JP 2014001655 A 20140109; JP 6032959 B2 20161130; US 2015167694 A1 20150618; WO 2013191002 A1 20131227

DOCDB simple family (application)
EP 13806282 A 20130606; CN 201380030766 A 20130606; JP 2012136593 A 20120618; JP 2013065641 W 20130606; US 201314409246 A 20130606